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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

November 30, 1989

Ronald E. Lambertson
Regional Director
U.S. Fish and Wildlife Service
One Gateway Center, Suite 700
Newton Corner, Massachusetts 02158

Dear Mr. Lambertson:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, we have reviewed the U.S. Fish and Wildlife's (USFWS) Draft Environmental Impact Statement (DEIS) for the proposed sea lamprey control program in Lake Champlain.

Lake Champlain is bordered in the United States by Vermont and New York, and in Canada by the Province of Quebec. In addition to supporting a major recreational sportfishery for the Champlain region, Lake Champlain is the primary water supply source for 51 water supply systems in Vermont, New York, and Canada and a private water supply source for numerous year-round and seasonal homes that border it. It further supports numerous agricultural, industrial, and recreational uses for the surrounding region. Finally, in April, 1989, the United Nations designated this water body as the Lake Champlain-Adirondack International Biosphere Reserve in recognition of its significant ecological and social value. The proposed program would apply the chemical lampricides TFM and Bayer 73 to Lake Champlain over an eight-year period.

Our comments focus primarily on the application of NEPA in defining the project purpose and need, cumulative impacts, and reasonable alternatives to the proposed action, as well as technical issues concerning the preferred alternative identified by the USFWS.

NEPA ISSUES

Project Purpose and Need: According to the DEIS, the objective or purpose of the proposed program is to "....(a)chieve an abrupt and substantial reduction in the abundance of parasitic stage sea lampreys for 8 years with 2 complete treatments of important ammocoete-producing areas using chemical lampricides TFM and Bayer 73 (5% granular)." It also seeks to "....monitor and assess the effects of sea lamprey reduction on the characteristics of certain fish populations, the sportfishery, and the area's economy," as well as formulate long-range policy and management strategies for managing sea lamprey in Lake Champlain. The DEIS further indicates that the need for this action stems from evidence that the lower-than-expected salmonid yield in Lake Champlain, which supports a major sportfishing industry, is the result of parasitism by sea lamprey (p. 2-5).

We believe the purpose and need discussion defines the issues that should be considered in the analysis too narrowly in that it focuses only on meeting the needs of sportfishing industry interests. In doing this, the analysis ignores the multiple uses and values of Lake Champlain and the cumulative impact that these uses have upon the resource (see further discussion below).

Specifically, the analysis assumes that federally supported salmonid stocking should proceed without examination of whether that action and its impacts are compatible with the overall goals and interests of managing and protecting Lake Champlain. This premise is inappropriate because it 1) ignores the obligation under NEPA to review the environmental impacts to Lake Champlain of the stocking program itself, and 2) unreasonably narrows the range of alternatives to this proposal that should be fully analyzed and presented for public review and comment.

With regard to the stocking program, while the DEIS does discuss the predator/prey relationship that exists between sea lamprey and salmonids, it virtually ignores the obvious connection between stocking Lake Champlain with an increased prey base and the likelihood that sea lamprey populations will increase as a result. The USFWS has thus inappropriately focused attention on the sea lamprey population increase as the problem ripe for review, when the multiple-use pressures on Lake Champlain, to which its own stocking program contributes, clearly indicate the need for a broader analysis of impacts.

We thus believe the DEIS should include a discussion of the multiple uses of Lake Champlain, the importance of these uses to the surrounding community, and their cumulative impact (see discussion below) on the resource. The document should also provide an analysis of prey/predator as well as competitor dynamics in Lake Champlain so that the impacts of the stocking program to the aquatic community there are clearly documented for public review. This would further establish an opportunity to more fully address the overall management goals for Lake Champlain and focus some needed attention on the multiple values of this water resource.

Alternatives: As is the case here, a flawed purpose and need analysis often results in a skewed alternatives analysis that favors the goal(s) of the project proponents. We believe the range of alternatives presented in the DEIS is unreasonably narrow in that it considers only those actions that would serve the perceived interests of the sportfishing industry (even "no action" adopts a paramount interest in maintaining a sportfishery quota).

We believe that other management goals should be proportionately represented in the analysis, including those alternatives, such as managing the resource for its indigenous population, that may be more protective of the other uses and values of Lake Champlain

while at the same time effective in addressing sportfishing interests and the need to control the sea lamprey population. Though such an alternative as this may not immediately satisfy the desires of the sportfishing industry, it may be the environmentally preferable choice when viewed in a more appropriate broader context and as such should be presented for public review and comment.

Cumulative Impacts/Indirect Effects: Council on Environmental Quality regulations implementing NEPA require a thorough examination of cumulative, secondary, and indirect impacts of proposed actions under review. These regulations define indirect effects to include growth-inducing effects and effects related to induced changes in the pattern of land use, population density, or growth rate. "Effects" includes ecological, aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative (40 CFR Sec. 1508.7-1508.8).

Though the DEIS clearly indicates that the proposal will result in secondary growth impacts and create new demands on infrastructure and other environmental resources, its presents virtually no detailed analysis of these reasonably foreseeable effects. Instead, it either defers this analysis to later studies or states that responsible third parties, such as state and local permitting agencies, will oversee the mitigation of any adverse growth-related impacts that may arise from the program (see, for example, pgs. 181-184). NEPA requires, however, that this analysis occur **before** decisions to approve an action are made.

Furthermore, with regard to mitigation, NEPA requires, first, that any mitigation proposals be preceded by a complete analysis of impacts and alternatives and, second, that mitigation proposals provide the following information: what impacts, specifically, the proposed mitigation is designed to address; the effectiveness of the proposed measures in dealing with the specific impacts identified; what authority is responsible for the implementation of these measures; and the likelihood that the measures proposed will be implemented. We thus believe the analysis should be revised to include a discussion, at the level of detail outlined above, of the potential cumulative, secondary, and indirect impacts that may result from the proposed action.

The following comments raise technical concerns relating to the proposed action.

Water Supply Protection: We recommend reviewing with great caution any proposal to add pesticides/lampricides for non-water-treatment-related reasons to a major source of drinking water. The fact that, to date, there has been no determination as to the concentrations of TFM and/or Bayer 73 that would be acceptable in drinking water, and there is a lack of data to help establish human tolerance levels in potable water, necessitates a conservative approach that offers the greatest protection to the resource.

The following are additional technical comments:

The draft EIS (pages 63 and 87-89) focuses only on surface water sources as potential contamination receptors. The final EIS must also evaluate any ground water supplies, which may be recharged by surface water, along those tributaries where there are planned lampricide application points. Although soil attenuation is stated to be high, the draft EIS lists the conditions under which ground water contamination would most likely occur (page 251). To evaluate this possibility, a detailed discussion of the ground water system must be provided in the final EIS.

In a related matter, the draft EIS states (page 166) that approximately 2,000 lampricide treatments have been conducted in waters of the Great Lakes and in two lakes in upstate New York. Apparently, some of the surface waters in these project areas are utilized as water supply sources for a number of municipalities. Since the draft EIS does not provide sufficient information to understand what the potential impacts of lampricide applications are on this project's potentially impacted water supply sources, information or monitoring data to confirm whether or not these past lampricide treatments had any impact on any water supply sources should be made available for comment in the final EIS.

Further, the draft EIS discusses (page 168) the possibility that a number of water systems could be impacted by the proposed lampricide applications, yet it omits discussion of any drinking water monitoring while the proposed lampricide applications are being conducted. Therefore, since water supplies in the project area utilize both basin, streamwater, and possibly private ground water wells, the FEIS must discuss in detail the potential impact of lampricide applications on public water supplies. Moreover, the project must include the development of an appropriate drinking water monitoring program that is documented and agreed upon by local, state, and federal agencies. The program must be implemented prior to, during, and after lampricide applications. This information should be made available for comment in the final EIS, and incorporated into the Record of Decision.

The draft EIS discusses (page 170) "trigger points" in TFM (i.e., concentration levels of 20 and 100 ppb). The final EIS should explain how these levels were established and whether they can be justified. In addition, it should indicate whether there are similar "trigger points" available for Bayer 73 as well as whether any mutagenicity or teratological data for Bayer 73 exists. Moreover, before actual use of TFM and Bayer 73 is begun, a copy of the latest accepted labeling for products should be obtained to assure that all uses are carried out in a manner consistent with the product labeling. Furthermore, the presurvey-determined rates, if different for different treatment sites, should also be provided, in addition to a copy of the labeling to those responsible for treatment. We understand one or both of the

lampricides is (are) undergoing the EPA reregistration process. Since the application of sea lamprey control project is proposed for use over an eight-year period, we strongly recommend if the project is approved, constant updates be made regarding the status of the chemicals to assure compliance with all pesticide regulations.

With regard to editing, DEIS makes a statement on page 56 that expresses the opinion of a particular person who represents the U.S. Fish and Wildlife Service. However, this statement could easily be misinterpreted as that of EPA's position regarding tolerance levels for TFM. Specifically, the draft EIS states that the "EPA feels that the proposed tolerances of 0.50 ppm in potable water, 0.1 ppm in potable water, 0.1 ppm in meat and milk, and 20 ppm in fish should be adequate to protect human health". Based on discussions with our Office of Pesticide Programs, we understand that there is a petition pending, and TFM is currently under review in hopes of establishing tolerance levels for TFM in fish, meat, and milk. However, as of yet, EPA has not finalized any tolerance levels of TFM. This statement must be revised and updated to avoid any misinterpretation.

Based on our review and in accordance with EPA policy, we have rated this draft EIS EO-2, "Environmental Objections/Insufficient Information." Attached is a description of the EPA rating system.

We offer our assistance in working with the Fish and Wildlife Service to explore remedies to these concerns to ensure substantive and procedural compliance with NEPA.

Please contact me (FTS# 835-3422) or Patience Whitten (FTS# 835-3413) if you have any questions.

Sincerely,

Elizabeth Higgins Congram

Elizabeth Higgins Congram
Assistant Director for Environmental Review
Office of Government Relations and Environmental Review